

## REL Southwest Ask A REL Response

February 2019

### Question:

*What is the relationship between student agency at school and student outcomes?*

### Response:

Thank you for the question you submitted to our REL Reference Desk. We have prepared the following memo with research references to help answer your question. For each reference, we provide an abstract, excerpt, or summary written by the study's author or publisher. Following an established Regional Educational Laboratory (REL) Southwest research protocol, we conducted a search for research reports as well as descriptive study articles on the relationship between student agency and student outcomes.

We have not evaluated the quality of references and the resources provided in this response. We offer them only for your reference. Also, we searched the references in the response from the most commonly used resources of research, but they are not comprehensive, and other relevant references and resources may exist. References provided are listed in alphabetical order, not necessarily in order of relevance. We do not include sources that are not freely available to the requestor.

For the purpose of this response, student agency is defined as placing students in the role of active agents of their own learning.<sup>1</sup> A recent synthesis of this concept noted that there are past, present, and future components to student agency:

- Setting advantageous goals.
- Initiating action toward those goals.
- Reflecting on and regulating progress toward those goals.<sup>2</sup>

This response will include references and resources addressing classroom environments and interventions that seek to promote student agency. It also includes research on self-regulation, which involves setting and initiating goals and reflecting on goal progress.

<sup>1</sup> Williams, P. (2017). Student agency for powerful learning. *Knowledge Quest*, 45(4), 8–15. <https://eric.ed.gov/?id=EJ1136307>

<sup>2</sup> Poon, J. D. (2018, September 11). Part 1: What do you mean when you say “student agency?” [Blog post]. Retrieved from <https://education-reimagined.org/what-do-you-mean-when-you-say-student-agency/>.

## Research References

Dynan, L., Cate, T., & Rhee, K. (2008). The impact of learning structure on students' readiness for self-directed learning. *Journal of Education for Business*, 84(2), 96–100. Retrieved from <https://www.researchgate.net/publication/254344825>

*From the abstract:* “Self-directed learning (SDL) skills are the basis of lifelong learning. The authors present findings from a classroom experiment to assess acquisition of the skill of SDL under structured and unstructured learning environments. The authors found that structure match enhances SDL skills and that courses designed to enhance students' readiness for SDL can do so. However, the majority of the students in this study, who were likely to be similar to other students at public universities in metropolitan areas, entered the course unprepared for SDL. The structured environment, in which students model good learning skills, provided a more suitable environment for improving student readiness for SDL for more students. The authors make recommendations for the development of SDL across the college curriculum.”

Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235–266. Retrieved from [http://kanagawa.lti.cs.cmu.edu/olcts09/sites/default/files/Hmelo-Silver\\_2004.pdf](http://kanagawa.lti.cs.cmu.edu/olcts09/sites/default/files/Hmelo-Silver_2004.pdf)

*From the abstract:* “Problem-based approaches to learning have a long history of advocating experience-based education. Psychological research and theory suggests that by having students learn through the experience of solving problems, they can learn both content and thinking strategies. Problem-based learning (PBL) is an instructional method in which students learn through facilitated problem solving. In PBL, student learning centers on a complex problem that does not have a single correct answer. Students work in collaborative groups to identify what they need to learn in order to solve a problem. They engage in self-directed learning (SDL) and then apply their new knowledge to the problem and reflect on what they learned and the effectiveness of the strategies employed. The teacher acts to facilitate the learning process rather than to provide knowledge. The goals of PBL include helping students develop 1) flexible knowledge, 2) effective problem-solving skills, 3) SDL skills, 4) effective collaboration skills, and 5) intrinsic motivation. This article discusses the nature of learning in PBL and examines the empirical evidence supporting it. There is considerable research on the first 3 goals of PBL but little on the last 2. Moreover, minimal research has been conducted outside medical and gifted education. Understanding how these goals are achieved with less skilled learners is an important part of a research agenda for PBL. The evidence suggests that PBL is an instructional approach that offers the potential to help students develop flexible understanding and lifelong learning skills.”

Loyens, S. M. M., Magda, J., & Rikers, R. M. J. P. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational Psychology Review*, 20(4), 411–427. Retrieved from <https://link.springer.com/article/10.1007/s10648-008-9082-7>

*From the ERIC abstract:* “This study investigated the role of self-directed learning (SDL) in problem-based learning (PBL) and examined how SDL relates to self-regulated learning (SRL). First, it is explained how SDL is implemented in PBL environments. Similarities between SDL and SRL are highlighted. However, both concepts differ on important aspects. SDL includes an additional premise of giving students a broader role in the selection and evaluation of learning materials. SDL can encompass SRL, but the opposite does not hold. Further, a review of empirical studies on SDL and SRL in PBL was conducted. Results suggested that SDL and SRL are developmental processes, that the ‘self’ aspect is crucial, and that PBL can foster SDL. It is concluded that conceptual clarity of what SDL entails and guidance for both teachers and students can help PBL to bring forth self-directed learners.”

Ramdass, D., & Zimmerman, B. (2011). Developing self-regulation skills: The important role of homework. *Journal of Advanced Academics*, 22(2), 194–218. Retrieved from <https://www.davidsongifted.org/Search-Database/entry/A10702>

*From the abstract:* “The article evaluates the relationship between homework and self-regulation from the elementary grades to college. It reveals that quality measures of homework such as managing distractions, self-efficacy and perceived responsibility for learning, setting goals, self-reflection, managing time, and setting a place for homework completion are more effective than only measuring the amount of time spent on homework. During homework completion, students engage in self-regulation by motivating themselves, inhibiting distractions, using strategies to complete homework, managing time, setting goals, self-reflecting on their performance, and delaying gratification. As a result, self-regulation and homework are related and the findings show that from elementary grades to college, skilled learners engaged in the above self-regulatory behaviors during homework activities. Self-regulatory behaviors develop gradually over time with repeated practice. Evidence from experimental studies shows that students can be trained to develop self-regulation skills during homework activities. It is important to continue with training studies at all grade levels so that students can become aware of the relationship between homework activities and these self-regulation processes such as goals, self-efficacy, self-reflection, time management, and delay of gratification. Evidence from correlational studies showed that students’ self-regulation skills and motivational beliefs correlate positively with homework activities. Homework assignments that are adequately challenging and interesting help struggling and at-risk students develop motivation and self-regulation skills and achieve success. Teachers can help students develop these behaviors by using homework logs. Data from the logs can help teachers show students their strengths and help them overcome their weaknesses.”

Shannon, D., Salisbury-Glennon, J., & Shores, M. (2012). Examining the relationships among classroom goal structure, achievement goal orientation, motivation and self-regulated learning for ethnically diverse learners. *Journal of Research in Education*, 22(2), 136–168. <https://eric.ed.gov/?id=EJ1098427>

*From the ERIC abstract:* “The purpose of this study was to explore the learning strategies used by ethnically diverse learners and to investigate the relationships among the

constructs of classroom goal structure, achievement goal orientation, motivation and self-regulated learning in an ethnically diverse population of fourth and fifth grade learners (n = 396). Goal setting, environmental restructuring, and seeking assistance from adults were described most frequently by this sample of African American and Hispanic elementary students. Correlational analyses revealed moderate positive relationships among the constructs of classroom goal structure, achievement goal orientation, motivation, and self-regulated learning. Further analyses by means of structural equation modeling supported a model depicting positive relationships between classroom goal structure and achievement goal orientation, achievement goal orientation and motivation, and achievement goal orientation and self-regulated learning. Finally, Hispanic students reported higher levels of task structure and task orientation, compared to African American students.”

What Works Clearinghouse. (2017). *Self-regulated strategy development* (What Works Clearinghouse Intervention Report). Washington, DC: Institute of Education Sciences, U.S. Department of Education. <https://eric.ed.gov/?id=ED577336>

*From the ERIC abstract:* “‘Self-Regulated Strategy Development’ (‘SRSD’) is an intervention designed to improve students’ academic skills through a six-step process that teaches students specific academic strategies and self-regulation skills. The practice is especially appropriate for students with learning disabilities, the focal population of the current report. The intervention begins with teacher direction and ends with students independently applying the strategy, such as planning and organizing ideas before writing an essay. More specifically, the six steps involve the teacher providing background knowledge, discussing the strategy with the student, modeling the strategy, helping the student memorize the strategy, supporting the strategy, and then watching as the student independently performs the strategy. A key part of the process is teaching self-regulation skills, such as goal-setting and self-monitoring, which aim to help students apply the strategy without guidance. The What Works Clearinghouse (WWC) identified 10 studies of SRSD that both fall within the scope of the Students with a Specific Learning Disability topic area and meet WWC pilot single-case design standards. No studies meet WWC group design standards. No studies meet pilot single-case design standards without reservations, and 10 studies meet pilot single-case design standards with reservations. Together, these studies included 43 children ages 7 to 16 who had a specific learning disability.”

## Additional Organizations to Consult

Collaborative for Academic, Social, and Emotional Learning (CASEL) – <http://www.casel.org/>

*From the website:* “Collaborative for Academic, Social, and Emotional Learning (CASEL) is the nation’s leading organization advancing the development of academic, social and emotional competence for all students. Our mission is to help make evidence-based social and emotional learning (SEL) an integral part of education from preschool through high school. Through research, practice and policy, CASEL collaborates to

ensure all students become knowledgeable, responsible, caring and contributing members of society.”

CASEL offers resources on its website and online library –  
<https://casel.org/resources-learn/>

CASEL Guide: Effective Social and Emotional Learning Programs –  
<http://www.casel.org/guide>

U.S. Department of Education, “Competency-Based Learning or Personalized Learning” –  
<https://www.ed.gov/oii-news/competency-based-learning-or-personalized-learning>

*From the website:* “Transitioning away from seat time, in favor of a structure that creates flexibility, allows students to progress as they demonstrate mastery of academic content, regardless of time, place, or pace of learning. Competency-based strategies provide flexibility in the way that credit can be earned or awarded, and provide students with personalized learning opportunities. These strategies include online and blended learning, dual enrollment and early college high schools, project-based and community-based learning, and credit recovery, among others. This type of learning leads to better student engagement because the content is relevant to each student and tailored to their unique needs. It also leads to better student outcomes because the pace of learning is customized to each student.

By enabling students to master skills at their own pace, competency-based learning systems help to save both time and money. Depending on the strategy pursued, competency-based systems also create multiple pathways to graduation, make better use of technology, support new staffing patterns that utilize teacher skills and interests differently, take advantage of learning opportunities outside of school hours and walls, and help identify opportunities to target interventions to meet the specific learning needs of students.”

## Methods

### Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

- Student agency and achievement
- (“student voice and student agency”) AND “achievement”
- (“student voice” OR “student agency”) AND “achievement”
- Student agency
- Self-directed learning
- Self-regulated learning and student achievement
- “Self-regulated learning” OR “Student agency”

- Self-regulated learning
- Student empowerment
- Self-regulated learning and achievement

### **Databases and Resources**

We searched [ERIC](#) for relevant, peer-reviewed research references. ERIC is a free online library of more than 1.7 million citations of education research sponsored by the Institute of Education Sciences (IES). Additionally, we searched the [What Works Clearinghouse](#).

### **Reference Search and Selection Criteria**

When we were searching and reviewing resources, we considered the following criteria:

- *Date of the publication:* References and resources published from 2004 to present, were included in the search and review.
- *Search priorities of reference sources:* Search priority is given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, academic databases, including ERIC, EBSCO databases, JSTOR database, PsychInfo, PsychArticle, and Google Scholar.
- *Methodology:* The following methodological priorities/considerations were given in the review and selection of the references: (a) study types—randomized control trials, quasi-experiments, correlational studies, descriptive data analyses, literature reviews, mixed methods analyses, and so forth; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected, and so forth), study duration, and so forth; and (c) limitations, generalizability of the findings and conclusions, and so forth.

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This memorandum is one in a series of quick-turnaround responses to specific questions posed by stakeholders in the Southwest Region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), which is served by the Regional Educational Laboratory (REL) Southwest at AIR. This memorandum was prepared by REL Southwest under a contract with the U.S. Department of Education’s Institute of Education Sciences (IES), Contract ED-IES-91990018C0002, administered by AIR. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.